Remarks/Arguments

The Applicant thanks the Examiner for the interview of October 2, 2007.

During the interview, the Examiner suggested that the Applicant submit a further paper setting forth the basis for the patentability of claim 7 over the art of record, intimating that this will likely lead to withdrawal of the finality of the office action. The Examiner also requested a further description of FIG. 4. This response is motivated by the Examiner's suggestion and request.

1. ### Claims 7-12 Not Obvious under 35 U.S.C. §103(a)

Claim 7 is set forth below for convenience. As requested by the Examiner, the Applicant has indicated (embedded in square brackets below) where support for the various claim limitations may be found in the application as filed.

Claim 7 (Previously presented): A wireless mobile device [10, FIG. 1] comprising:

a processor [12, FIG. 1];

computer readable memory in communication with said processor [16, FIG. 1], storing virtual machine software [24, FIGS. 1 and 2] controlling operation of said wireless mobile device,

said virtual machine software comprising:

a parser [61, FIG. 2] for receiving a text file [para. 93];

a screen generation engine [67, FIG. 2], for presenting at least one screen at said wireless mobile device in accordance with said text file [paras. 95-98];

an event handler [65, FIG. 2] for processing events arising in response to interaction with said at least one screen in accordance with said text file [paras. 101, 102];

object classes [69, FIG. 2; para. 39] corresponding to actions to be taken by said wireless mobile device in response to interaction with said at least one screen [para. 40];

an object class [69, FIG. 2; para. 39] corresponding to a data table for storing data at said wireless mobile device [para. 41; FIGS. 16I, 16J]; and

an object class [69, FIG. 2; para. 39] corresponding to a network message to be received or transmitted by said wireless mobile device [para. 41; FIGS. 16K,16M].

In the Final Office Action, the Examiner rejected claim 7, as well as all of the other claims in the application, under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent 7,051,080 B1 to Paul in view of U.S. Patent 7,010,573 B1 to Saulpaugh et al.

The Applicant strenuously traverses this rejection on the basis that no *prima facie* case of obviousness has been established for claim 7. The reason is twofold: (a) the prior art references do not teach or suggest all of the claim limitations; and (b) there is no suggestion or motivation to modify the references or combine reference teachings in the manner suggested by the Examiner.

(a) Prior Art References Do Not Teach or Suggest all of the Limitations of Claim 7

As discussed during the Examiner interview, the cited references simply do not teach at least the following limitations of claim 7:

(i)   a wireless mobile device comprising: ... computer readable memory in communication with said processor, storing virtual machine software ... comprising: a parser for receiving a text file;

(ii)   a wireless mobile device comprising: ... computer readable memory in
         communication with said processor, storing virtual machine software ...
         comprising: ... <u>a screen generation engine</u>, for presenting at least one
         screen at said wireless mobile device in accordance with said text file;

(iii)   a wireless mobile device comprising: ... computer readable memory in
         communication with said processor, storing virtual machine software ...
         comprising: ... <u>object classes corresponding to actions to be taken by said
         wireless mobile device</u> in response to interaction with said at least one
         screen;

(iv)   a wireless mobile device comprising: ... computer readable memory in
         communication with said processor, storing virtual machine software ...
         comprising: ... <u>an object class corresponding to a data table</u> for storing
         data at said wireless mobile device; or

(v)   a wireless mobile device comprising: ... computer readable memory in
         communication with said processor, storing virtual machine software ...
         comprising: ... <u>an object class corresponding to a network message</u> to be
         received or transmitted by said wireless mobile device.
         [Emphasis added]

The language "a wireless mobile device comprising: ... computer readable
memory in communication with said processor, storing virtual machine software ...
comprising:" is reproduced in each of (i) to (v) above, as a reminder that claim 7 is
directed to a <u>wireless mobile device</u>, and in particular, to a wireless mobile device
comprising a <u>computer readable memory storing virtual machine software</u> comprising the
various features of paragraphs (i) to (v).

Fundamentally, the Examiner's reliance upon the purported disclosure by Paul at
Fig. 1, #110 of a processor and computer readable memory in communication with said
processor storing virtual machine software controlling operation of a mobile device (at

Fig. 1, #101) is flawed. The reason, as emphasized during the Examiner interview, is that reference numeral 110 of Paul does *not* refer to a wireless mobile device, but rather refers to a mobile applications server (5:26-32) that is separate from mobile device #101 of Paul.

Accordingly, limitation (i) above is simply not disclosed by Paul Fig. 1, #112, since reference numeral 112 of Paul does *not* form part of mobile device 101. Rather, #112 refers to a portion of the separate mobile applications server 110 (8:21-22).

Similarly, limitation (ii) above is not disclosed by Paul 6:63-67 and 7:1-10 as the Examiner suggests, since the applications 116 referenced in that passage are executed at the mobile applications server 110 (6:33-34), not at the mobile device 101.

With respect to the remaining limitations (iii), (iv) and (iv) above, the Examiner suggests at page 5 of the Office Action that the limitations are disclosed in Saulpaugh et al. at 21:40-67 as "message gate code". However, the cited portion of Saulpaugh et al. reveals nothing as to the composition of "message gate code." Moreover, the Applicant can see no basis for concluding that "message gate code" inherently includes the above-noted claim elements. Accordingly, it is submitted that limitations (iii) to (v) are not taught or suggested by any of the cited references. To the extent that the Examiner disagrees, the Applicant expressly requests clarification from the Examiner as to the columns and lines in Saulpaugh et al. upon which the conclusion that "message gate code" inherently includes the above-noted claim limitations is based.

(b) Lack of Suggestion or Motivation To Modify References or Combine Reference Teachings to arrive at Claim 7

In subsection (a) above, the Applicant sets forth its basis for concluding that claim limitations (iii) to (v) are not disclosed in Saulpaugh et al.

Even if the above-noted claim limitations were disclosed in Saulpaugh et al., however, the Applicant submits that one of ordinary skill in the art would not combine them with Paul, as the Examiner suggests, because doing so would be contrary to the approach of the Paul reference.

As understood by the Applicant, the strategy of Paul is to implement the possibly complex logic that determines screen content at the mobile applications server 110 (Paul 7:11-26), not at the mobile device 101. The rationale for this approach (as detailed at page 4 of the previous office action response) is to permit mobile device 101 to act as a "dumb device" that merely displays the pages sent to it by the server 110 and reports back any keys pressed by the user (4:19-23; 9:63-10:2). In line with this approach, an objective of Paul appears to be to avoid unnecessarily occupying the limited memory of the mobile device (see Paul abstract, last sentence).

Given this model of operation, a person of ordinary skill would not add the various claimed object classes (as purportedly disclosed by Saulpaugh et al.) to the mobile device, since this would not only fail to contribute to the "page by page" navigation approach of Paul, but would also unnecessarily occupy the limited memory at the mobile device, contrary to the stated rationale of Paul.

(c) Conclusion

For all of the above reasons, the Applicant submits that a *prima facie* case of obviousness has not been made in respect of claim 7. Withdrawal of the rejection of this claim, and all claims dependent therefrom (i.e. claims 8-12), is therefore respectfully requested.

2.   <u>Claims 1-6, 13-16 Not Obvious under 35 U.S.C. §103(a)</u>

The Applicant's arguments regarding the patentability of the remaining claims of the present application (i.e. claims 1-6 and 13-16), as made at pages 3-6 of the previous

Office Action response dated April 16, 2007, are maintained.   For convenience, these arguments are reproduced below.

To establish a *prima facie* case of obviousness, three criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings.   Second, there must be a reasonable expectation of success.   Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.   The teaching or suggestion to make the claimed invention and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure. MPEP § 2142.

The Applicant submits that the *prima facie* case of obviousness has not been established for claims 1-6 and 13-16 because there is no suggestion or motivation to modify the references or combine reference teachings in the manner suggested by the Examiner.

At page 3 of the Office Action, Examiner states, in respect of claim 1, that Paul fails to explicitly teach a representation of a text file defining: a format of network messages for exchange of data generated by said application, but suggests that this claim feature is disclosed in Saulpaugh et al. The Examiner states that it would have been obvious to one of ordinary skill in the art at the time invention was made to combine the teachings of the cited references "to provide a representation of a text file defining a format of network messages for exchange of data as disclosed by Saulpaugh et al. because it would enable the mobile device capable of communicating among network clients and services."

In response, the Applicant submits that one of ordinary skill in the art would not combine the references as suggested, as doing so would be entirely contrary to the approach of the Paul reference. Moreover, because combining the references would needlessly increase wireless network traffic and possibly increase transmission costs, the suggested combination would be avoided.

Paul is understood to be concerned with making network-based services readily available to a wide range of mobile devices, which may have limited resources (see Paul, 3:34-47). In the exemplary system disclosed by Paul, a mobile applications server 110 hosts one or more applications 116 that can be accessed by a mobile device 101 by way of a network 108 and wireless link 106 (see Paul, 5:57-59 and FIG. 1A). The applications 116 communicate indirectly with the mobile device through an intermediary mobile interactions server 150, which generates data, e.g. in the form of a textual markup language document, that describes one or more graphical elements (a "page") for display on the screen of the mobile devices (see 7:39-42, 9:53-57; 32:12-21). The Applicant can find no evidence that any other type of information is transmitted to the mobile device 101. Accordingly, the markup language document received by the mobile device is understood to contain only graphical element/page information. This is consistent with Paul's strategy of implementing the (possibly complex) logic that determines mobile device "page" content at the mobile applications server 110 rather than at the mobile device (7:11-26). This is understood to permit mobile device 101 to act as a "dumb device" which merely displays the pages sent to it by the server 110 and reports back any keys pressed by the user (4:19-23; 9:63-10:2). The screen content that is sent to the mobile device 101 is sent in a known format, such as HDML, VoxML or WML (9:20-27). This is advantageous because mobile devices may be preprogrammed to be able to understand these formats.

Given this operation, it would be illogical for Paul to be combined with *any* reference that suggests that the textual document received by the mobile device should contain, in addition to screen layout and content information, "a format of network messages for exchange of data generated by said application". The reason is that Paul already uses "markup languages tailored to types of mobile devices", such as HDML, VoxML or WML (which the devices already understand), for this purpose (9:20-23).

The Examiner's attention is drawn to term "said application" in the relevant portion of claim 1 ("a format of network messages for exchange of data generated by said application" [emphasis added]). The point is this: what is at issue here is not the exchange of data generated by any application, but rather the exchange of data generated

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by <u>said</u> application, i.e. the application executing at a computing device whose data is presented at a remote wireless device. It is clear that the Examiner considers application 116 (see Paul 6:53-57, as cited by the Examiner) to be the "application" of claim 1. So what is at issue is whether Saulpaugh et al. suggests receiving, at the wireless device, a representation of a text file defining a format of network messages for exchange of data generated by <u>application 116</u> of Paul. As noted above, Paul already has an approach for presenting that application 116 at the wireless device: it uses "markup languages tailored to types of mobile devices" for this purpose. The introduction of a new message format is therefore unnecessary.

Based on the foregoing, it is clear that inclusion of message format definitions in a text document received by the mobile device 101 of Paul would be wasteful of device resources (e.g. memory), because the definitions are not needed by the mobile device in order to present application data. Moreover, the unnecessarily included message format descriptions would needlessly consume wireless bandwidth when the text document is transmitted to the wireless device. This may disadvantageously increase costs in the case where a service provider charges for wireless service based on the amount of data transmitted.

For all of these reasons, the Applicant submits that one of ordinary skill in the art would not combine the references as the Examiner suggests. Accordingly, the Applicant submits that a *prima facie* case of obviousness has not been made in respect of claim 1. Withdrawal of the rejection of this claim, and all claims dependent therefrom (i.e. claims 2-6), is therefore respectfully requested. As well, withdrawal of the rejection of claim 13, which was rejected for the same reasons as claim 1, and claims 14-16 depending therefrom, is also requested, on the same grounds.

3.   <u>Further Description of FIG. 4</u>

During the interview of October 2, 2007, the Examiner requested a further description of FIG. 4, ostensibly to assist the Examiner with possible further searching.

As described in the published application, e.g., at paragraph 49, FIG. 4 illustrates an exemplary XML application definition file 28 having three components.

The first component is a user interface definition section 48. The user interface section 48 may be used to define various screens having buttons, menus, checkboxes, and other user interface items (see paras. 52-63) as well as events associated with user interface items and actions that should be performed when the events occur (see, e.g., paras. 64 and 65; see also FIG. 16U at section 5.2.3.2 and FIGS. 9 and 10). This section defines the format of each screen and how the user interacts with them (see para. 49). The intent is for virtual machine software at the mobile device to process this section as described at paras. 95-98 and FIGS. 8-9 in order to create and display screens at run time.

The second component is a network transactions definition section 50. This section defines the format of data to be exchanged with the server-based application at run time (see para. 49; see also the message 94 described in para. 118 and shown in FIG. 14). This may include defining an update that is performed to a table in the device's local storage in association with a message (see para. 67; see also below).

The third component is a local data definition section 52 defining the format of data to be stored locally on the mobile device, i.e. a logical database that may be stored at the mobile device (see paras. 49 and 69). Database tables having fields and attributes within the tables may be defined (see paras. 70, 71).

4.   Abstract in Acceptable Form

During the interview, the Applicant's agent requested that the objection to the abstract be withdrawn on the basis that the abstract as amended is free of legal phraseology such as "means" and "said". This request is hereby reasserted.

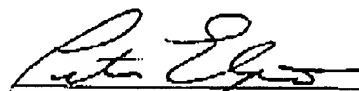Application Serial No. 09/846,781   11

5.   Closing

Based on the foregoing, it is believed that the present application is in allowable form. Early favorable reconsideration of the application is therefore earnestly solicited.

Please note the new attorney docket number of 93422-45 for this application.

If any issues arise, or if the Examiner has any suggestions for expediting allowance of this application, the Applicant respectfully invites the Examiner to contact the undersigned at the telephone number indicated below.

The Commissioner is hereby authorized to charge any additional fees connected with this communication or credit any overpayment to our Deposit Account No. 19-2548.

Respectfully submitted,

Peter A. Elyjiw
Registration No. 58,893

SMART & BIGGAR
438 University Avenue
Suite 1500, Box 111
Toronto, Ontario
Canada M5G 2K8
Telephone: (416) 593-5514
Facsimile: (416) 591-1690

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